

AMENDMENT TO THE SPECIFICATION

On page 2, after line 23, please delete the following paragraph, previously inserted by Applicants' amendment:

-- The transmission electron microscopic examination of the product is conducted following the procedure described in U.S. Patent 6,287,992, column 12, lines 10 to 15, replacing the epoxy samples with nanocomposite polymer samples. --

Please insert the following abstract (copied from the published international application WO 00/29467) starting on a separate sheet after the claims:

--ABSTRACT

The instant invention in one embodiment is a process for producing a nanocomposite polymer by dispersing a polyvalent anionic organic edge coated quaternary ammonium intercalated multi-layered silicate material into a thermoplastic polymer. The process includes the step of mixing the polyvalent anionic polymer edge coated quaternary ammonium intercalated multi-layered silicate material with the thermoplastic polymer at a temperature greater than the melting point of the thermoplastic polymer. The instant invention in another embodiment is a process for producing a nanocomposite polymer by dispersing a polyvalent anionic organic edge coated quaternary ammonium intercalated multi-layered silicate material into a thermoset polymer. The process of this embodiment includes the steps of: (a) mixing the polyvalent anionic organic edge coated quaternary ammonium intercalated multi-layered silicate material with a thermoset prepolymer; and (b) curing the thermoset prepolymer to set the thermoset polymer. The instant invention in yet another embodiment is a composition including: (a) a polymer; and (b) a multi-layered silicate material dispersed in the polymer, the multi-layered silicate material having edges, at least a portion of the edges of the multi-layered silicate material being bound to a polyvalent anionic organic material. The instant invention in further yet another embodiment is process for producing a nanocomposite polymer, including the steps of: (a) mixing a polyvalent anionic organic edge coated quaternary ammonium intercalated multi-layered silicate material with a monomer; and (b) polymerizing the monomer.--